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(FILE 'HOME' ENTERED AT 10:18:44 ON 04 FEB 2003)

FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS, LIFESCI' ENTERED AT 10:19:41 ON 04 FEB 2003

L1	372494	S PROTEASE?
L2	735	S NOCARDIOPSIS
L3	59	S L1 AND L2
L4	10012	S FEED (A) ADDITIVE?
L5	1	S L3 AND L4
L6	6127	S ACID (A) STABLE
L7	406	S L1 AND L6
L8	7253	S VEGETABLE (A) PROTEIN?
L9	48795	S ANIMAL (A) FEED?
L10	55897	S L8 OR L9
L11	4	S L7 AND L10
L12	4	DUP REM L11 (0 DUPLICATES REMOVED)
		E SJOEHOLM C/AU
L13	23	S E3-E4
L14	5	S OESTERGAARD P R/AU
		E OESTERGAARD P R/AU
L15	34	S E3-E7
L16	51	S L13 OR L15
L17	6	S L1 AND L16
L18	6	DUP REM L17 (0 DUPLICATES REMOVED)

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NEWS
        Apr 09
                BEILSTEIN: Reload and Implementation of a New Subject Area
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        Apr 09
                 ZDB will be removed from STN
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        Apr 19
                US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
        Apr 22
NEWS 6
                Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS
        Apr 22
                BIOSIS Gene Names now available in TOXCENTER
NEWS 8 Apr 22
                Federal Research in Progress (FEDRIP) now available
NEWS 9
        Jun 03
                New e-mail delivery for search results now available
NEWS 10 Jun 10
                MEDLINE Reload
NEWS 11 Jun 10
                PCTFULL has been reloaded
NEWS 12 Jul 02
                FOREGE no longer contains STANDARDS file segment
NEWS 13 Jul 22 USAN to be reloaded July 28, 2002;
                 saved answer sets no longer valid
NEWS 14 Jul 29
                Enhanced polymer searching in REGISTRY
NEWS 15 Jul 30 NETFIRST to be removed from STN
NEWS 16 Aug 08
                CANCERLIT reload
NEWS 17 Aug 08
                PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 18 Aug 08 NTIS has been reloaded and enhanced
NEWS 19 Aug 19
                Aquatic Toxicity Information Retrieval (AQUIRE)
                now available on STN
NEWS 20
        Aug 19
                IFIPAT, IFICDB, and IFIUDB have been reloaded
NEWS 21 Aug 19
                The MEDLINE file segment of TOXCENTER has been reloaded
NEWS 22 Aug 26
                Sequence searching in REGISTRY enhanced
NEWS 23 Sep 03
                JAPIO has been reloaded and enhanced
NEWS 24 Sep 16
                Experimental properties added to the REGISTRY file
NEWS 25 Sep 16 CA Section Thesaurus available in CAPLUS and CA
NEWS 26 Oct 01 CASREACT Enriched with Reactions from 1907 to 1985
NEWS 27 Oct 21 EVENTLINE has been reloaded
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NEWS 29 Oct 24 Nutraceuticals International (NUTRACEUT) now available on STN
NEWS 30 Oct 25 MEDLINE SDI run of October 8, 2002
NEWS 31 Nov 18 DKILIT has been renamed APOLLIT
NEWS 32 Nov 25 More calculated properties added to REGISTRY
NEWS 33 Dec 02 TIBKAT will be removed from STN
NEWS 34 Dec 04 CSA files on STN
NEWS 35 Dec 17
                PCTFULL now covers WP/PCT Applications from 1978 to date
                TOXCENTER enhanced with additional content
NEWS 36 Dec 17
NEWS 37 Dec 17
                Adis Clinical Trials Insight now available on STN
NEWS 38 Dec 30
                ISMEC no longer available
NEWS 39
        Jan 13
                Indexing added to some pre-1967 records in CA/CAPLUS
NEWS 40
       Jan 21
                NUTRACEUT offering one free connect hour in February 2003
NEWS 41
        Jan 21
                PHARMAML offering one free connect hour in February 2003
NEWS 42
       Jan 29
                Simultaneous left and right truncation added to COMPENDEX,
                ENERGY, INSPEC
NEWS EXPRESS January 6 CURRENT WINDOWS VERSION IS V6.01a,
             CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
             AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002
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             STN Operating Hours Plus Help Desk Availability
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FILE 'HOME' ENTERED AT 10:18:44 ON 04 FEB 2003

=> file medline embase biosis biotechds scisearch hcaplus ntis lifesci COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

0.42

0.42

FULL ESTIMATED COST

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FILE 'LIFESCI' ENTERED AT 10:19:41 ON 04 FEB 2003 COPYRIGHT (C) 2003 Cambridge Scientific Abstracts (CSA)

=> s protease? 372494 PROTEASE?

=> s Nocardiopsis

735 NOCARDIOPSIS

=> s l1 and l2 59 L1 AND L2

=> s feed (a) additive? 10012 FEED (A) ADDITIVE?

ANSWER 1 OF 1 HOAPLUS DURFTEIGHT DOOR ACS AN 2001:597756 HCAPLUS 131 | 157131

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ΙN
     Oestergaard, Peter Rahbek; Sjoeholm, Carsten
PA
     F Hoffmann-La Roche A.-G., Switz.
SO
     PCT Int. Appl., 49 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
IC
     ICM A23K001-165
CC
     17-12 (Food and Feed Chemistry)
FAN.CNT 2
    PATENT NO.
                    KIND DATE
                                         APPLICATION NO. DATE
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PΙ
    WO 2001058276
                     A2
                           20010816
                                         WO 2001-EP1153 20010205
    WO 2001058276
                     A3 20020221
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            BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    EP 1257176
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                                        EP 2001-915190 20010205
        R: AT, BE, CH, DE, DK, ES, FP, GB, GP, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
    US 2001026797
                    A1 20011004
                                         US 2001-779323
                                                           20010208
    US 2003021774
                      A1 20030130
                                         US 2001-779334
                                                           20010208
PRAI DK 2000-200
                      Α
                           20000208
                     Р
    US 2000-183133P
                           20000217
                     W
    WO 2001-EP1153
                           20010205
    Disclosed are acid-stable proteases homologous to those derived
AB
    from strains of the genus Nocardiopsis, their use in animal
    feed, feed-additives and feed compns. contg. such
    proteases, and methods for the treatment of vegetable proteins
    using such proteases.
ST
    protease Nocardiopsis animal feed vegetable protein
IT
    Feed
      Nocardiopsis
        (acid-stable Nocardiopsis proteases in animal feed)
IT
    Vegetable
        (proteins; treatment with proteinases in manufq. feed)
TT
    Proteins, general, biological studies
    RL: FFD (Fcod or feed use); BIOL (Biological study); USES (Uses)
        'soybean; animal feed manuf. with proteinases and)
ΙT
    Proteins, general, biological studies
    RL: FFD (Food or feed use); FICL (Biological study); USES (Uses)
       ·vegetable; treatment with proteinases in manufg. feed)
    9001:92-7, Protease
ΙT
    RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
       (acid-stable proteases in animal feed)
ΙT
    9031-11-2, .beta.-Galactanase 37278-89-0, Xylanase
                                                          37341-58-5, Phytase
    39346-28-6, Galactanase
    RL: FFD 'Food or feed use); BICL (Biological study); USES (Uses)
       (animal feed contg. proteinases and)
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FILE 'MEDLINE, EMBASE, BIOSIS, BICTECHDS, SCISEAFCH, HCAPLUS, NTIS, LIFESCI' ENTERED AT 10:19:41 ON 04 FEB 2003

: :

L3 59 S L1 AND L2 10012 S FEED (A) ADDITIVE? L4 L_5 1 S L3 AND L4 => s acid (a) stable L6 6127 ACID (A) STABLE \Rightarrow s 11 and 16 406 L1 AND L6 => s vegetable (a) protein? 7 FILES SEARCHED... 7253 VEGETABLE (A) PROTEIN? => s animal (a) feed? 48795 ANIMAL (A) FEED? => s 18 or 19 1 FILES SEARCHED... 55897 L8 OR L9 => s 17 and 110 L114 L7 AND L10 => dup rem 111 PROCESSING COMPLETED FOR L11 L124 DUP REM L11 (0 DUPLICATES REMOVED) => d 1-4 ibib ab ANSWER 1 OF 4 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT AND ISI T₁1.2 ACCESSION NUMBER: 2001-16039 BIOTECHDS TITLE: Use of acid stable protease for producing a food composition; for use as feedstuff, as a food-additive and in vegetable protein treatment AUTHOR: Oestergaard P R; Sjoeholm C PATENT ASSIGNEE: Roche LOCATION: Basle, Switzerland. PATENT INFO: WO 2001058276 16 Aug 2001 APPLICATION INFO: WO 2001-EP1153 5 Feb 2001 PRIORITY INFO: DK 2000-200 8 Feb 2000 DOCUMENT TYPE: Patent LANGUAGE: English OTHER SOURCE: WPI: 2001-488930 [53] The use of at least one stable protease (EC-3.4.21.62) in AB feedstuff where the protease has identity of at least 70% to a 188 amino acid sequence (I) and or a 17 amino acid sequence (II), is claimed. Also claimed are: improving the nutritional value of feedstuff; an animal food-additive; and treatment of **vegetable** proteins. At least one acid stable protease is useful in the preparation of a composition for use in feedstuff. The protease has 71% identity to (I) and/or (II). The dosage of the **protease** is 0.01-200 mg. The feed composition is useful for feeding animals Factors follow

ANSWER 2 OF 4 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT AND 184 ברכברפורין אישקבט. ביין וביים ביידירים

acid stable protesse

the subtilisin for producing a food composition; for use as feedstuff, as a food-additive and in

vegetable protein treatment

Oestergaard P R; Sjoeholm C; Kluenter A AUTHOR:

PATENT ASSIGNEE: Roche

LOCATION: Basle, Switzerland.
PATENT INFO: WO 2001058275 16 Aug 2001 APPLICATION INFO: WO 2001-EP1152 5 Feb 2001 PRIORITY INFO: DK 2000-200 8 Feb 2000 DOCUMENT TYPE: Patent

LANGUAGE: English

LANGUAGE: ENGITED CONTROL OF THE SOURCE: WPI: 2001-488929 [53]

The use of at least one stable protease (EC-3.4.21.62) in feedstuff where the protease is of the subtilisin family and/or has less than 10% residual activity when inhibited with subtilisin, is claimed. Also claimed are: improving the nutritional value of feedstuff; an animal food-additive; and treatment of vegetable proteins. At least one acid stable protease is useful in the preparation of a composition for use in feedstuff. The protease is of the subtilisin family and/or 10% residual activity when inhabited with subtilisin. The dosage of the protease is 0.01-200 mg/kg of feed. The feed composition is useful for feeding animals, including humans. Animals include ruminants and non-ruminants i.e. monogastric animals i.e. pigs, poultry and fish. The feedstuff comprises phytase, $\verb|endo-1,4-beta-D-xylanase| (EC-3.2.1.8)|, | galactanase| | and/or| | beta-glucanase| | and/or| | and/or$

(EC-3.2.1.39). Soybean (Glycine max) is included amongst the vegetable

L12 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2001:597756 HCAPLUS

DOCUMENT NUMBER:

source. (63pp)

135:152030

TITLE:

Use of acid-stable

proteases in animal feed

INVENTOR(S):

Oestergaard, Peter Rahbek; Sjoeholm, Carsten

F Hoffmann-La Roche A.-G., Switz. PATENT ASSIGNEE(S):

SOURCE:

PCT Int. Appl., 49 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT : | NO. | | KII | ND | DATE | | | А | PPLI | CATI | ON N | Ο. | DATE | | | |
|----------|------|-------------------------------------|--------------------|-----|------|------|------|------|------|------|--------|-------|------|------|------|-----|
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| WO 2001 | 0582 | 76 | A: | 2 | 2001 | 0816 | | W | 0 20 | 01 E | P115 | 3 | 2001 | 0205 | | |
| WO 2001 | 0582 | 76 | A. | 3 | 2002 | 0221 | | | | | | | | | | |
| W : | ΑE, | ΑG, | AL, | AM, | ΑT, | ΑU, | AZ, | BA, | BB, | BG, | BR, | BY, | BΞ, | CA, | CH, | CN, |
| | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EE, | ES, | FΙ, | GB, | GD, | GE, | GH, | GM, | HR, |
| | HU, | ID, | ΙL, | IN, | IS, | JP, | KE, | KG, | ΚP, | KR, | KΖ, | LC, | LK, | LR, | LS, | LT, |
| | LU, | LV, | ΜA, | MD, | MG, | ΜK, | MN, | MW, | MX, | MΖ, | NO, | NZ, | PL, | PT, | RO, | RU, |
| | SD, | SE, | SG, | SI, | SK, | SL, | ΤJ, | TM, | TR, | TT, | TΖ, | UA, | UG, | US, | IJΖ, | VN, |
| | YU, | ZA, | ZW, | AM, | AΖ, | ΒY, | HG, | ΚZ, | MD, | RU, | TJ, | TM | | | | |
| RW: | GH, | GM, | ΚE, | LS, | MW, | MΣ, | SD, | SL, | SZ, | TZ, | UG, | ZW, | ΑT, | ΒE, | CH, | CY, |
| | | ${\textstyle \bigcap \mathcal{V}}$ | Γ \subset | ₽ਾ | ロロ | CIT. | dib. | 1.00 | * = | | *,* <* | * * * | **** | 25. | | |

PRIORITY APPLM. INFO.:

Disclosed are acid-stable proteases AΒ homologous to those derived from strains of the genus Nocardiopsis, their use in animal feed, feed-additives and feed compns. contg. such proteases, and methods for the treatment of vegetable proteins using such proteases.

L12 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2001:597755 HCAPLUS

135:180103 DOCUMENT NUMBER:

Use of acid-stable subtilisin TITLE:

proteases in animal feed

Oestergaard, Peter Rahbek; Sjoeholm, Carsten; INVENTOR(S):

Kluenter, Anna-marie

PATENT ASSIGNEE(S): F Hoffmann-La Roche A.-G., Switz.

SOURCE: PCT Int. Appl., 63 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| | | KIND DA | ATE | | | | | | | DATE | | | |
|----------------|---------|------------------------|---------|-----|-------|-------|-------|-------|-----|-------------------------|------|-----|------|
| | 8275 | A2 20
A3 20 | 0010816 | | | |)1-E | | | 20010 | 0205 | | |
| W: A | AE, AG, | AL, AM, A | AT, AU, | | | | | | | | | | |
| H | HU, ID, | IL, IN, I | IS, JP, | KE, | KG, | KP, | KR, | KΞ, | LC, | LK, | LR, | LS, | LT, |
| | | SG, SI, S
ZW, AM, A | | | | | | | | UG, | US, | UZ, | VN, |
| D | DE, DK, | KE, LS, N
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| EP 125717 | 75 | CG, CI, C | 0021120 | · | EF | 200 | 01-90 | 7489 | 9 | 20010 | 205 | | D.T. |
| I | E, SI, | CH, DE, I | FI, RO, | MK, | CY, | AL, | TR | | | | | MC, | PΤ, |
| | 1774 | A1 20
A1 20 | 0030130 | | US | 3 200 | 01-77 | 79334 | 1 | 20010 | 208 | | |
| PRIORITY APPLI | INFO. | . : | | Ţ | JS 20 | 00-1 | | 33P | Р | 20000
20000
20010 | 0217 | | |

AΒ Disclosed are acid-stable proteases of the subtilisin family, their use in animal feed, feed-additives and feed compns. contg. such proteases, and methods for the treatment of vegetable proteins using such proteases.

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(FILE 'HOME' ENTERED AT 10:18:44 ON 04 FEB 2003)

FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS, רה מסק זה אר דן מדי הי דה מספסתיאס ודאסספיי

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              55897 S L8 OR L9
                 4 S L7 AND L10
L11
                    4 DUP REM L11 (0 DUPLICATES REMOVED)
L12
=> e sjoeholm c/au
           10 SJOEHOLM B/AU
E1
                         SJOEHOLM BIRGITTA/AU
E2
                 1
                 10 --> SJOEHOLM C/AU
E3
               10 --> SJOEHOLM C/AU

13 SJOEHOLM CARSTEN/AU

1 SJOEHOLM ELISABETH/AU

1 SJOEHOLM EVA/AU

1 SJOEHOLM G/AU

1 SJOEHOLM GOERAN HENRY/AU

1 SJOEHOLM GOESTA/AU

1 SJOEHOLM H/AU

6 SJOEHOLM HANS/AU
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E12
=> s e3-e4
               23 ("SJOEHOLM C"/AU OR "SJOEHOLM CARSTEN"/AU)
=> s oestergaard P R/au
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L14
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1 OESTERGAARD PER BJOERN/AU

6 OESTERGAARD PETER RAHBEK/AU

1 OESTERGAARD PREHEN/AU

7 OESTERGAARD S/AU

2 OESTERGAARD SOEREN/AU

1 OESTERGAARD STEEN/AU

4 OESTERGAARD T/AU
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                 34 ("OESTERGAARD P R"/AU OR "OESTERGAARD PER"/AU OR "OESTERGAARD
L15
                     PER B"/AU OR "OESTERGAARD PER BJOERN"/AU OR "OESTERGAARD PETER
                     RAHBEK"/AU)
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              51 L13 OR L15
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                    6 DUP REM L17 (0 DUPLICATES REMOVED)
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for use as feedstuff, as A f variable, we amuse rejet able protein treatment

AUTHOP: Oestergaard P R; Sjoeholm C

WO 2001058276 16 Aug 2001 PATENT INFO: APPLICATION INFO: WO 2001-EP1153 5 Feb 2001 PRIORITY INFO: DK 2000-200 8 Feb 2000

DOCUMENT TYPE: Patent LANGUAGE: English

OTHER SOURCE: WPI: 2001-488930 [53]

The use of at least one stable protease (EC-3.4.21.62) in feedstuff where the protease has identity of at least 70% to a 188 amino acid sequence (I) and or a 17 amino acid sequence (II), is claimed. Also claimed are: improving the nutritional value of feedstuff; an animal food-additive; and treatment of vegetable proteins. At least one acid stable protease is useful in the preparation of a composition for use in feedstuff. The protease has 71% identity to (I) and/or (II). The dosage of the protease is 0.01-200 mg. The feed composition is useful for feeding animals, including humans. Animals include ruminants and non-ruminants i.e. monogastric animals i.e. pigs, poultry and fish. The feedstuff comprises phytase, endo-1,4-beta-D-xylanase (EC-3.2.1.8), galactanase and/or beta-glucanase (EC-3.2.1.39). Soybean (Glycine max) is included amongst the vegetable source. (49pp)

ANSWER 2 OF 6 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT AND ISI

ACCESSION NUMBER: 2001-16038 BIOTECHDS

TITLE:

Use of acid stable protease of the subtilisin for

producing a food composition;

for use as feedstuff, as a food-additive and in vegetable

protein treatment

AUTHOR: Oestergaard P R; Sjoeholm C; Kluenter A

PATENT ASSIGNEE: Roche

LOCATION: Basle, Switzerland.
PATENT INFO: WO 2001058275 16 Aug 2001 APPLICATION INFO: WO 2001-EP1152 5 Feb 2001 PRIORITY INFO: DK 2000-200 8 Feb 2000

DOCUMENT TYPE: Patent

LANGUAGE: English
OTHER SOURCE: WPI: 2001-488929 [53]

The use of at least one stable **protease** (EC-3.4.21.62) in feedstuff where the protease is of the subtilisin family and/or has less than 10% residual activity when inhibited with subtilisin, is claimed. Also claimed are: improving the nutritional value of feedstuff; an animal food-additive; and treatment of vegetable proteins. At least one acid stable protease is useful in the preparation of a composition for use in feedstuff. The protease is of the subtilisin family and/or 10% residual activity when inhabited with subtilisin. The dosage of the protease is 0.01-200 mg/kg of feed. The feed composition is useful for feeding animals, including humans. Animals include ruminants and non-ruminants i.e. monogastric animals i.e. pigs, poultry and fish. The feedstuff comprises phytase, endo-1,4-beta-D-xylanase (EC-3.2.1.8), galactanase and/or beta-glucanase (EC-3.2.1.39). Soybean (Glycine max) is included amongst the vegetable source. (63pp)

L18 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2001:597756 HCAPLUS

DOCUMENT NUMBER: 1:5,150030

1917 Int. App..., 4 + pp.

CODEN: PIXXD2

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DOCUMENT TYPE: Patent LANGYAGE: F-91-64

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PATENT INFORMATION:

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APPLICATION NO. DATE
                   KIND DATE
    PATENT NO.
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    WO 2001058276 A2 20010816
WO 2001058276 A3 20020221
                                        WO 2001-EP1153 20010205
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            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    EP 1257176 A2 20021120 EP 2001-915190 20010205
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
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US 2001-779334 20010208
    US 2001026797 A1 20011004
    US 2003021774
                     Āί
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PRIORITY APPLN. INFO.:
                                      DK 2000-200 A 20000208
                                      US 2000-183133P P 20000217
                                      WO 2001-EP1153 W 20010205
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AΒ Disclosed are acid-stable proteases homologous to those derived from strains of the genus Nocardiopsis, their use in animal feed, feed-additives and feed compns. contg. such proteases, and methods for the treatment of vegetable proteins using such proteases.

L18 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2001:597755 HCAPLUS

DOCUMENT NUMBER:

135:180103

TITLE: Use of acid-stable subtilisin proteases in

animal feed

INVENTOR(S): Oestergaard, Peter Rahbek; Sjoeholm,

Carsten; Kluenter, Anna-marie F Hoffmann-La Roche A.-G., Switz.

SOURCE: PCT Int. Appl., 63 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT ASSIGNEE(S):

| PATENT NO. | | ΚI | | DATE | | | A. | PPLI | CATI | N MC | O . | DATE | | | |
|--------------------------|-----|--------------------------|--------------------------|--------------------------|--------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| WO 2001058
WO 2001058 | | | _ | | | | W |) 20 | 01 · E | P115: | 2 | 2001 | 0205 | | |
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LC,
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LR,
PT, | GM,
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RU, |
| | ΞA, | ZW, | AM, | | | | | | | | | | 55, | | |

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18, 31, 11, 10, 81, 90, M8, 00, A1, TB
US 2001026797 A1 20011004 US 2001 77923 20010208
US 2003021774 A1 20030130 US 2001 779334 20010208
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WO 2001-EP1152 W 20010205

AB Disclosed are acid-stable proteases of the subtilisin family, their use in animal feed, feed-additives and feed compns. contq. such proteases, and methods for the treatment of vegetable proteins using such proteases.

L18 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997:192181 HCAPLUS

DOCUMENT NUMBER:

126:183173

TITLE:

Proteolytic enzymes derived from Amycolata and Amycolatopsis and their use in cheese-making and

detergents

INVENTOR(S):

Sjoeholm, Carsten; Nielsen, Bjarne

Roenfeldt; Dambmann, Claus

PATENT ASSIGNEE(S):

Novo Nordisk A/s, Den.; Sjoeholm, Carsten; Nielsen,

Bjarne Roenfeldt; Dambmann, Claus

SOURCE:

PCT Int. Appl., 35 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| | PA7 | TENT | NO. | | KI | ND : | DATE | | | A: | PPLI | CATI | ON NO | Ο. | DATE | | | |
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| | WO | 9704 | 082 | | A | 1 | 1997 | 0206 | | W | 0 19 | 96-D | K299 | | 1996 | 0702 | | |
| | | W: | AL, | AM, | AT, | AU, | AΞ, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CZ, | DE, | DK, | EE, |
| | | | ES, | FΙ, | GB, | GE, | HU, | IL, | IS, | JP, | KE, | KG, | ΚP, | KR, | KΞ, | LK, | LR, | LS, |
| | | | LT, | LU, | LV, | MD, | MG, | MK, | MN, | MW, | MX, | NO, | NΞ, | PL, | PT, | P.O, | RU, | SD, |
| | | | SE, | SG | | | | | | | | | | | | | | |
| | | RW: | ΚE, | LS, | MW, | SD, | SI, | UG, | AT, | BE, | CH, | DE, | DK, | ES, | FΙ, | FR, | GB, | GR, |
| | | | ΙE, | ΙT, | LU, | MC, | NL, | PT, | SE, | BF, | ВJ, | CF, | CG, | CI, | CM, | GA | | |
| | ΑU | 9665 | 128 | | A. | 1 | 1997 | 0218 | | ΑI | J 19 | 96-6 | 5128 | | 1996 | 0702 | | |
| | ΕP | 8391 | 87 | | A. | 1 | 1998 | 0506 | | E | P 19: | 96-9 | 2478 | 7 | 1996 | 0702 | | |
| | | R: | ΑT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | ΙΤ, | LI, | NL, | SE, | PT, | ΙE, | FI |
| | CN | 1193 | 996 | | Α | | 1998 | 0923 | | CI | N 199 | 96-1 | 9643 | 9 | 1996 | 0702 | | |
| | US | 5948 | 746 | | Α | | 1999 | 0907 | | U | 3 199 | 98-7 | 269 | | 1998 | 0114 | | |
| PRIC | RITY | APP | LN. | INFO | . : | | | | I | DK 1 | 995-8 | 344 | | | 1995 | 0719 | | |
| | | | | | | | | | Ţ | WO 19 | 996-I | DK29: | 9 | | 1996 | 0702 | | |
| | | | | | | | | | | | | | | | | | | |

The present invention relates to novel proteolytic enzymes. More AB specifically, the present invention relates to proteolytic enzymes obtainable from strains of Amycolata and Amycolatopsis. Moreover the invention relates to a process for the prepn. of the proteolytic enzyme of the invention, as well as detergent additives and detergent compns. comprising the proteolytic enzyme. The **protease** purified from Amycolatopsis mediterranei had a mol. wt. of 33 kilodaltons and a pI of 9.1. The enzyme displayed >90% activity at pH 8-11 and had a temp. optimum between 30-45.degree. when detd. on casein substrate. Using glucagon as a substrate, the protease showed a preference for cleaving Arg-Arg and Trp-Leu bonds, with weaker activity at Lys-Tyr bonds. Detergent formulations contg. the protease are presented.

L18 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 1991:446691 HCAPLUS ישטטאייי הואסאטייסים. 115:42501

Tutaka; letersen, Lare 1.; Oestergaard, Per B.

; Kisiel, Walter

Biopharm. Div., Novo-Nord., Bagsvaerd, Den

CORPORATE SOUPCE:

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DOCUMENT TYPE: Journal LANGUAGE: English

The effects of zinc ions on the amidolytic and proteolytic activity of recombinant factor VIIa in the presence of physiol. levels of calcium ions were examd. The amidolytic activity of factor VIIa was inhibited half-maximally by 20 .mu.M zinc. The amidolytic activity of a complex of recombinant tissue factor and factor VIIa was inhibited half-maximally by 70 .mu.M zinc. In contrast to the results obtained with factor VIIa, the amidolytic activities of other human vitamin K-dependent coaquiation proteases including factor Xa, thrombin, and activated protein C were not appreciably affected by 50-100 .mu.M zinc. The proteolytic activation of factor X by a complex of factor VIIa and relipidated tissue factor apoprotein was inhibited half-maximally by 40 .mu.M zinc, whereas activation of factor IX in this system was inhibited half-maximally by 70 .mu.M zinc ions. Considerably higher levels of zinc (.apprx.100 .mu.M) were required to inhibit half-maximally the rate of factor X activation by a complex of factor VIIa and functional tissue factor on the surface of either a human bladder carcinoma cell line, J72, or stimulated human umbilical vein endothelial cells. Activation of factor IX by factor VIIa and tissue factor on the surface of J82 cells was not influenced by zinc. However, the activation rate of factor IX on human umbilical vein endothelial cells was inhibited half-maximally at 100 .mu.M zinc. activation of factor X by factor VIIa in the presence of small umilamellar phospholipid vesicles was inhibited half-maximally by 20 .mu.M zinc, whereas factor IX activation by factor VIIa was not appreciably influenced by a 10-100 .mu.M zinc. Thus, plasma levels of zinc ions inhibit the amidolytic and proteolytic activities of factor VIIa. The mechanism of this inhibition, as well as its possible physiol. relevance, is unknown.

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FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS, LIFESCI' ENTERED AT 10:19:41 ON 04 FEB 2003

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L1
         372494 S PROTEASE?
L2
            735 S NOCARDIOPSIS
L3
             59 S L1 AND L2
L4
          10012 S FEED (A) ADDITIVE?
L5
              1 S L3 AND L4
L6
           6127 S ACID (A) STABLE
L7
            406 S L1 AND L6
           T253 S VEGETABLE (A) PROTEIN?
1.8
L9
          48795 S ANIMAL (A) FEED?
          55897 S L8 OF L9
L10
              4 S L7 AND L10
L11
L12
              4 DUP REM L11 (0 DUPLICATES REMOVED)
                E SJOEHOLM C/AU
L13
             23 S E3-E4
L14
              5 S OESTEPGAARD P R/AU
                E OESTEPGAARD P R/AU
L15
             34 S E3-E7
L16
             51 S L13 OF L15
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| | Issue Date | Pages | Document ID |
|---|------------|-------|----------------------|
| 1 | 20011004 | 18 | US 20010026797
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| 2 | 19990907 | 28 | US 5948672 A |
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A1 | 201027 | | Protease variants and
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| 2 | 20011004 | 18 | US 2001
A1 | 100267 | | Use of acid-stable proteases
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| 3 | 20010911 | 20 | US 6287 | 7585 E | 31 | Methods for laundry using polycations and enzymes |
| 4 | 20010710 | 13 | US 6258 | 3129 E | | Method for enzymatic
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treatment of wool |

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| 12 | 19940517 | 13 | US 5312748 | | Protease |

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| | Title | | Current XRef |
|---|---|----------|--------------|
| 1 | Use of acid-stable proteases in animal feed | 424/94.6 | 426/54 |

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| 1 | | Sjoeholm, Carsten et
al. | | | | | | | |

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| 1 | | | 20030130 | 26 | US 20030021774
A1 |
| 2 | | | 20011004 | 18 | US 20010026797
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| | Title | Current OR | Current XRef |
|---|--|------------|-------------------------------------|
| 1 | Use of acid-stable subtilisin proteases in animal feed | | 424/442;
424/94.63;
424/94.66 |
| 2 | Use of acid-stable proteases in animal feed | 424/94.6 | 426/54 |

| | Retrieval
Classif | Inventor | S | C | P | 2 | 3 | 4 | 5 |
|---|----------------------|-----------------------------|---|---|---|---|---|---|---|
| 1 | | Sjoeholm, Carsten et
al. | | | | | | | |
| 2 | | Sjoeholm, Carsten et
al. | | | | | _ | _ | _ |

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| | Title | Current OR | Current XRef |
|---|--|------------|-------------------------------------|
| 1 | Use of acid-stable subtilisin proteases in animal feed | 424/94.3 | 424/442;
424/94.63;
424/94.66 |
| | Use of acid-stable proteases
in animal feed | 424/94.6 | 426/54 |
| 3 | System for infusion of medicine into the body of a patient | 604/67 | 604/891.1;
607/32 |

| | Retrieval
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| 1 | | Sjoeholm, Carsten et
al. | | | | | | | |
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